

MA3Z7920G

Silicon epitaxial planar type

For super high speed switching

For small current rectification

■ Features

- High-density mounting is possible
- Forward current (Average) $I_{F(AV)} = 100$ mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time t_{rr}
- Low forward voltage V_F and good rectification efficiency

■ Package

- Code
SMini3-F2
- Pin Name
1: Anode
2: N.C.
3: Cathode

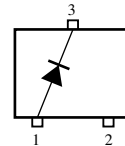
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---------------------------------------------|-------------|-------------|------------------|
| Reverse voltage | V_R | 30 | V |
| Repetitive peak reverse voltage | V_{RRM} | 30 | V |
| Forward current (Average) | $I_{F(AV)}$ | 100 | mA |
| Peak forward current | I_{FM} | 300 | mA |
| Non-repetitive peak forward surge current * | I_{FSM} | 1 | A |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

Note) *: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

■ Marking Symbol: M3T

■ Internal Connection



■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

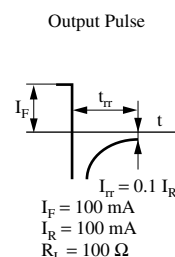
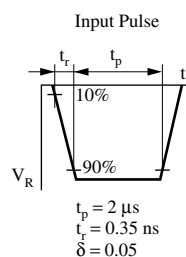
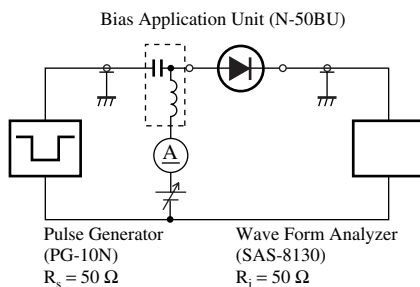
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|-----------------------------------------------------------------|-----|-----|------|---------------|
| Forward voltage | V_F | $I_F = 100$ mA | | | 0.55 | V |
| Reverse current | I_R | $V_R = 30$ V | | | 15 | μA |
| Terminal capacitance | C_t | $V_R = 0$ V, $f = 1$ MHz | | 20 | | pF |
| Reverse recovery time * | t_{rr} | $I_F = I_R = 100$ mA $I_{rr} = 0.1 I_R$, $R_L = 100 \Omega$ | | 2.0 | | ns |

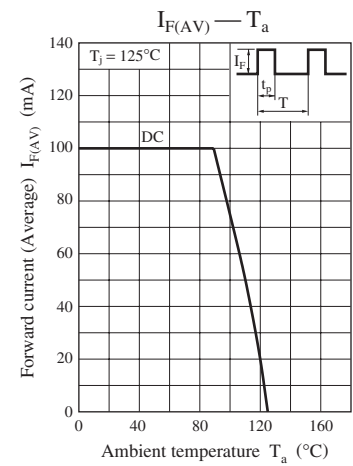
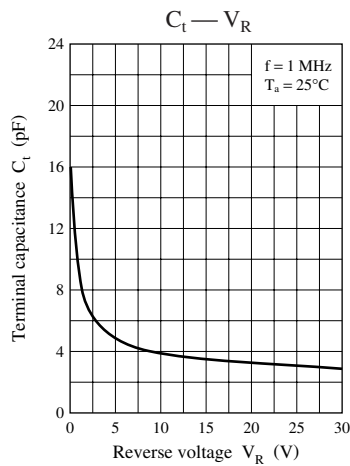
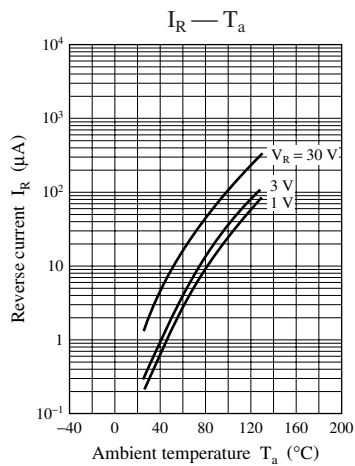
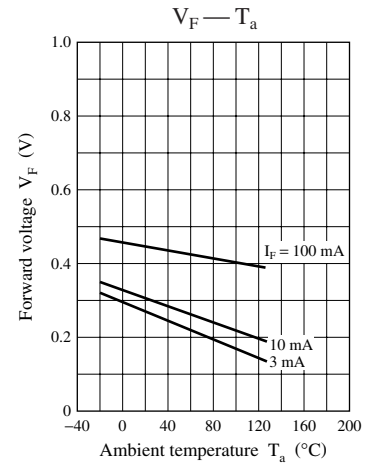
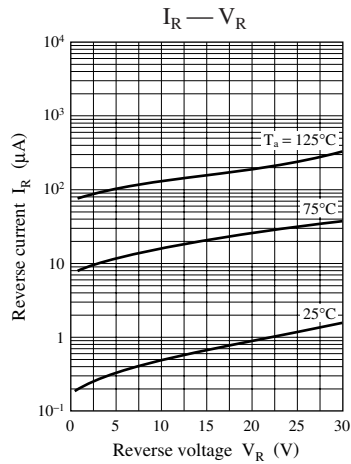
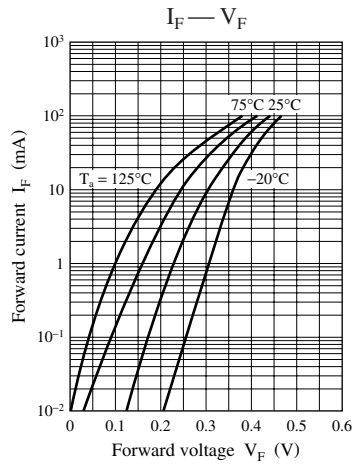
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 250 MHz.

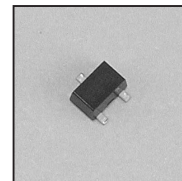
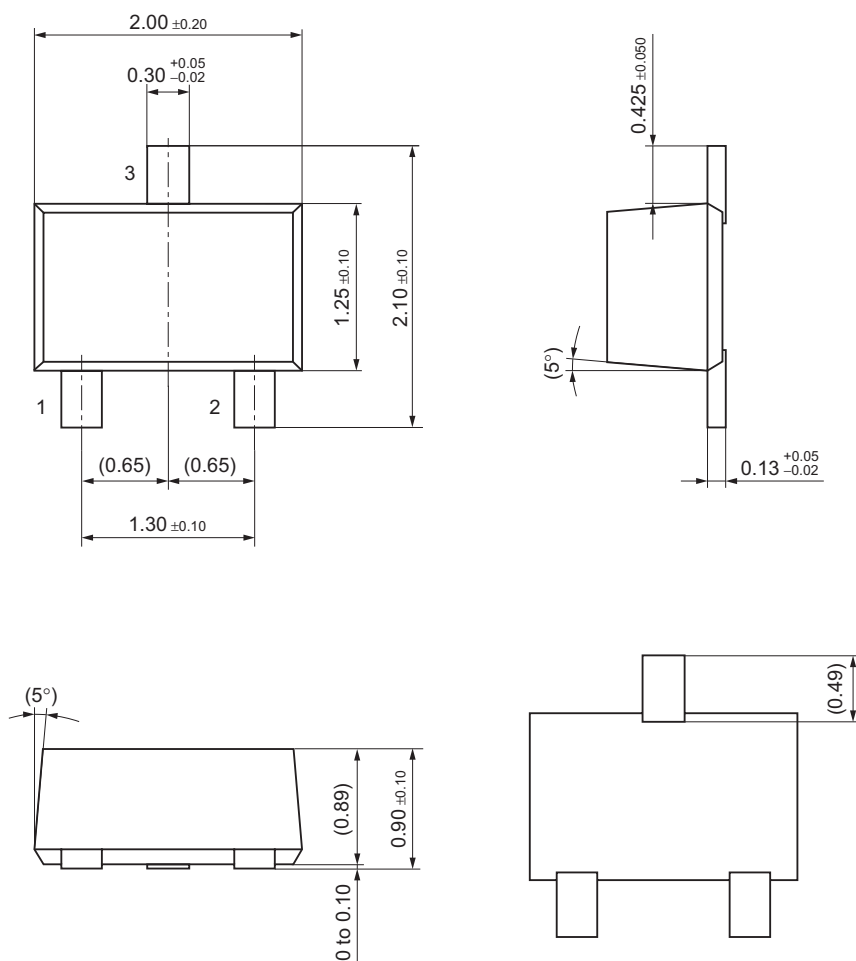
4. *: t_{rr} measurement circuit





SMini3-F2

Unit: mm



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